



THE JULY MEETING

It will be our pleasure to welcome Jim Bacon, G3YLA, the Anglia Television Weather Presenter, who is paying a return visit to our Society to bring us up-to-date with his analysis of the observations in the relationship between weather and radio propagation.

On his last visit in November 1989, Jim described how the co-ordinated observations of radio amateurs had enabled him to understand some of the properties in the lower levels of the ionosphere which cause sporadic E reflections. In the years between, Amateur Radio has enjoyed many technical advances and the peak of a sunspot cycle enabling more operators to understand the basic principles of propagation but there are still many question unanswered.

The meeting opens at 7.30pm and we look forward to an interesting and informative evening.

DATES FOR YOUR DIARY

- 1 July CLUB MEETING - Jim Bacon, G3YLA (Anglia TV).
- 6 July GARDEN PARTY - at the QTH of John & Pauline.
- 19 July RSGB HQ SATURDAY OPENING.
- 20 July OPEN DAY AT THE SANDFORD MILL.
- 27 July COLCHESTER RADIO & COMPUTER RALLY.
- 3 Aug. RSGB NATIONAL MOBILE RALLY - Woburn Abbey.
- 5 Aug. CLUB MEETING - History of C.A.R.S., part two.

THE END OF AN ERA - Roy, G3PMX

By now, many of you will have read the press report of the closing of the Marconi College in Arbour Lane. For the Chelmsford Amateur Radio Society this is a particularly sad announcement because it has been our monthly meeting venue for over 45 years and embraces many significant events and happy memories.

The Committee are searching for a new "home" and the Newsletter will keep you informed of progress towards a new venue, in the mean time we should be able to hold our August and September meetings at the College.

I am sure that all members will join me in expressing our sincere thanks to all the Staff at the College for their help and guidance in providing the facilities which have made our Club Meetings, Committee Meetings and Christmas Social events so comfortable and successful.

OPEN DAY AT THE MUSEUM

Quoting from the Chelmsford Museums Service Diary of Events "SANDFORD MILL OPEN DAY 20th July.

Open day at the Engine House project at Sandford Mill Waterworks, celebrating the 75th anniversary of the first regular British Broadcasts, with live radio and a new children's exhibition in the Marconi Hut.

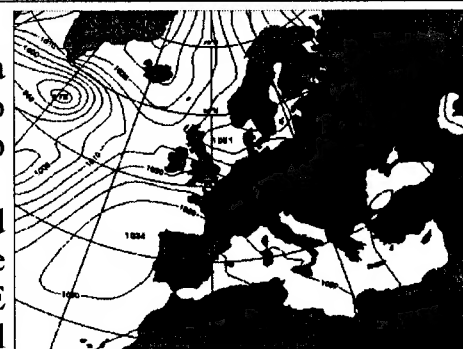
New collections and hands-on science exhibits on show, and visiting displays. Admission Free".

Our Society have agreed to provide a live HF station with the callsign GB2MT throughout the day and a working party to erect the aerials will meet at the site on Wednesday 16th July at 9.30am sharp.

If any members would like to help with operating the HF station or inform visitors during the Open Day, please make contact with Geoff, G7KLV or Pat, G0SBQ who are co-ordinating our effort.

DF NEWS

Three events are scheduled for July; on Friday 4th a Colchester evening event at Fordham Heath, on Friday 18th a Colchester evening event at Fordham Heath and on Sunday 20th a RSGB Qualifying event, Colchester/Chelmsford, Map 155, NGR 916 559.



CHAIRMANS' GARDEN PARTY

John and Pauline Bowen have kindly offered to arrange another garden party at their QTH on top of Danbury hill on Sunday 6th July from 2.30pm onwards. John requests "if the weather is dodgy, please check if the party is ON or OFF on answerphone (01245)226591".

Tea, soft drinks and Gateau will be provided by our hosts, any contributions of cakes etc., will be welcome. If you would like to attend, please tell John 'how many' at the July meeting, directions to the Bowen QTH will be available.

For maximum comfort you may bring your own folding chair.

It is hoped to have G0MWT/P operational on HF, lets hope the Wx will be fine and the rain has run out by then.

REPORT ON THE CONSTRUCTORS' COMPETITION

We were well represented this year despite the doubts that no entries would turn up, this was encouraging to see, as two years ago there were very few. It was nice to see the now mandatory finishing and in one instance starting a project on the evening of judging.. Will next year have someone starting from scratch during the judging? There were ten entries all of which were to a high standard and two new members submitting projects walked away with prizes. The submissions were presented as follows:-

1/ AC/DC Variable Output Device, Fred Wright (G6FXM)

Here is a project that at some time in our hobby we have all said "I could do with one of those" a power supply with a variable output in both DC and AC. A variac supplying an AC variable output, along with a transformer coupled output DC power supply 0-30 V at 6 A. All parts were salvaged from the loft shack and workshop and in Fred's own words "to make something useful, simple, cheap and enjoy doing it", (completed at 6pm on the day).

Fred gets 10 out of 10 for his presentation on Benjamin Franklin et al..

2/ Tone Burst for hands free microphone, Jason Pavia (G7RBR)

This was an entry driven by the necessity of wanting a tone burst on a hands free microphone. Although this was a kit, the standard of construction was good for its small size. The circuit has been in use for a while and performs well. As ever the housing on all useful projects was novel, a BT box! Novice Prize was awarded to Jason for his splendid efforts.

3/ Automatic Anchor Light, Eric Lawley (G8ADX)

International regulations for prevention of collisions at sea (rule 30) require a light to be shown at night, this needs some one to turn it on. Well his unit is automatic, using a L.D.R. to monitor the amount of light outside the lamp case. The project built in the K.I.S.S. style from odds and bits to keep it cheap. In the demo it was shown to work very well.

4/ 10db gain device (Amplifier for handheld), Tony Gilbey (G4YTG)

When I first saw this entry, I thought he was having me on... but on explanation it made a lot of sense. The use of a 1/4 wavelength of wire on the earth side of the handhelds B.N.C. connector as a ground plane thus improving the output and reception by a proven 10db. Simple and most effective and most of all CHEAP. Patent it or market it before someone else does Tony!

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CONSTRUCTORS' COMPETITION (continued)

5/ Reflectometer (VSWR Meter), Geoff Mills (G3EDM)

This V.S.W.R. meter had given 20 years of reliable service, then the meter went U/S a week before the meeting. Replacing the meter reminded Geoff that this was a project! The design came from the R.S.G.B. handbook and is OK up to full output on H.F. Housed in a home made aluminum case with Belling Lee (75ohm) sockets the overall project is most useful to Geoff.

6/ 2 Element Beam Antenna for 21/28 MHz, Fred Leach (G2HNF)

Based on a design by Alan Mills (EA7BA), Fred used the construction method for his beam as a good starting point for a smaller two band system for use by Philip (G0HSN) at his Braintree QTH. This was the **winning entry** as Fred had made a lot of effort in the design and analysis of the existing theory and mechanical construction, adapting it for his own use. Tuning the first trap required much fiddling to achieve resonance, the rest were made but found to be different in resonance although the same in construction. The total aerial was made from 64 parts all made by Fred in his workshop at home.

7/ Modifications to MFJ-259 SWR Analyser, Roy Martyr (G3PMX)

Roy's modification to the MFJ259 aerial analyser gave a finer movement to the frequency tuning range by means of a 10:1 slow motion drive unit. This was an innovation of Roy's to solve Charles's tune-up problem on the high Q loop aerial system that he uses. This is now not a problem as Charles can tune-up using the MFJ as the RF source, so avoiding a large signal on air.

8/ Robin Frequency counter (P/Wireless), Bob Tavener (SWL)

Bobs frequency counter was made from a design in Practical Wireless. The PCB's were from a manufacturer whilst the rest of the components were from local emporiums. The finished case was to a high standard including the lettering. The design was modified to include the 12v PSU internally. It was calibrated by use of an off-air frequency standard (WWV 10MHz).

It was found to be 8 parts per million drift. This counter was good up to 450MHz. Quality of the work and knowledge that went into this project won him **second prize**.

9/ Flashing Lights and Siren, Peter Mead (SWL)

Anybody that plays with Lego get the judges appreciation. Both the flasher (multivibrator) and the siren (relaxation oscillator) were from the PW magazine. This project showed the basic steps in an electronic design cycle. The circuits were bread boarded on Vero, and then PCB's were manufactured in quantities, assembled and tested by Peter. The finished circuits were then mounted in Lego model cars. Peter showed a basic understanding of the resistor / capacitor time constants used in both circuits. For this Peter (our youngest member) recieved the **third prize**.

10/ Recycled Floppy Disk storage boxes, Colin Page (G0TRM)

In this world of recycling fervor, Colin saw an opportunity to do his bit, and did it. His entry was a multiple electronics odds and bits (raw materials for next years project) draw system. Using 5 1/4" floppy disk boxes in a wooden frame, Colin gave a practical demonstration of the ease in which these simple recycled plastic cases (minus the inner part) could be used with the addition of a front strengthener and knob to form the draw.

Teatime: The judges had a heated deliberation over the placing of the prizes at tea time.

Award ceremony: The prizes were given out in reverse order and photos were taken by Roy of the recipients of the cash awards.

Special awards: Tony - Just in time entry, **Brinkmanship award**.

Recycled award, Colin to be presented with an old certificate next year (HI HI)

Summing up: The variety of projects, their number and quality, show that the constructors competition has been brought back from the dead! Thank you to all the constructors for an entertaining evening

The brotherhood of JUDGES: Chris and Andy Chapman

NB: Next year can all mains operated equipment be fitted with a fuse...

A REQUEST FROM BRIAN, G3CVI

Got any old "electric wirelesses"... radiograms, recorders etc? If you would care to part with them to a good home I will undertake to deliver them to the Wireless Museum in the High Light Museum at Harwich, where the keeper and I have discussed the possibility of saving suitable old gear from going to the scrap heap. With new premises in the offing (literally) he is willing to accept any old sets which are of historical interest. The collection is going well and I believe it is worthy of support.

Please contact Brian, your Treasurer, G3CVI.

COMMITTEE MEETING

The next Committee meeting will be held at 7.30pm on Wednesday 9th July, in Telford Lodge, you are welcome to join us.

DF AT THE SEASIDE - Andrew, G4KQE

The DF season is now well underway, qualifying events being held at Coventry, South Manchester and just recently in Devon.

The organisers of the Torbay Qualifying event this year decided to use the Taunton & Lyme Regis map, instead of Torbay to reduce competitors travel distance, so we had a chance to see East Devon.

The competition start was the refreshment stop at the junction of the A30 and the A303 South of Taunton. On our journey we studied the map and thought that it was a possibility that one hidden station would be on the coast among the cliffs and landslips or thick undergrowth on the headland near Lyme Regis.

We were not surprised therefore when both bearings at the start went South-East towards the coast. We decided to take a gamble and drove to within two miles of the coast, stopping midway between the two first bearings. At this point the signals from both stations were very strong, and the bearings indicated that BOTH stations were on the coast. We found a farm track close to where we thought the 'B' station was, and ran down the sides of meadows towards the sea. Unfortunately there was a steep escarpment and thickly wooded area leading down so we had to run along the top before it levelled out and we could climb down into the wilderness. There was just one footpath through the wood, otherwise it was just like a thick jungle. At some points we were crawling along on hands and knees following animal tracks to get through the dense undergrowth.

Eventually the signal got stronger and we found some aerial wire; there was a lot, so it was quite difficult to locate the station, but we eventually located him at 3.30pm, close to the footpath under a fallen tree.

We only had an hour to find the next station, but the bearings indicated it was only about four miles away, so we ran back to the car, and then drove straight to a likely footpath at the end of the cliffs and landslip. We ran as fast as we could, meeting other competitors coming the other way. The signal got stronger and when it was at right angles to the footpath, we dived in and found an aerial. A quick search indicated that perhaps we were at the wrong end of the wire, so we ran a bit further into the undergrowth where we could see a small track. A quick scramble down the wooded slope were at 4.10pm we found the second transmitter.

The day was hot and sunny, so after running across fields we were very hot and sticky. We had a chat with the operator and then decided that a dip in the sea would be ideal to cool down but although we were fairly close, the cliffs meant that we could not easily reach the sea.

With a few minutes in hand we decided to drive the mile into Lyme Regis. We parked right on the beach, peeled off our shirts and dived into the sea. We were only able to spend a few minutes in the water, but it was bliss.

After buying a souvenir stick of rock, we set off for the tea in Chard, where the results were announced. We were pleased with our placing of second, and Chelmsford Club was well represented, with Andy Collet coming first and Dick Brocks coming third. Andy had already qualified for the National Final, so that meant that Dick and myself were the qualifiers at the seaside in Devon.

SHAVING CLUB ANNIVERSARY - Roy, G3PMX

At an informal meeting in the Maldon Little Ship Clubhouse on Sunday 22nd June, many of the present 'transmitting' and 'listening' Amateurs joined together to celebrate the 70th anniversary of the formation of the 160 Metre early morning net which is aptly titled "The Shaving Club" and which is currently chaired by Arthur, G3KPJ. In memory of all those stations who had participated over the years, Arthur had prepared a number of booklets and cassette tapes depicting in words and sounds the stations which have provided so much enjoyment to all those involved.

Unbeknown to Arthur, John Robson, G3HMQ had organised a commemorative shield and anniversary card which was presented to Arthur in recognition of his dedication to running the net.

FOR SALE

PKW 80M and 40M vertical with radial kit, also works on 20, 15 & 10M. Unused and boxed £50. o.n.o. Martin G4TOO, (01245)266728

73 from Roy & Ela Martyr,
G3PMX & G6HKM

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Deadline for the next NewsLetter is Saturday 26th July.